



Dart Hawkesbury
1270 Aberdeen St. Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

PO No	Supplier	Line Item No	Ref No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
PO040153	MES002-VC	1	1	Net 30	M304B0.250x0.500	304 Bar .250 X .500 ; MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft				200	6/29/2018	200		S088677	Stock	6/28/2018	\$ 4.25 / ft	5		\$850.00	Metaux Solutions
		2	2		M17-4-H900-R0.250	17-4 SS H900 Round Bar 0.250" ; M174PH- H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643				12		12		S088678	Stock	6/28/2018	\$ 23.40 / ft	5		\$280.80	Metaux Solutions
		3	3		M17-4-H1150-R2.750	17-4 SS H1150 Round Bar 2.750" ; MATERIAL: 17-4 PH CONDITION H1150 receive ft				6		6		S088480	Stock	6/28/2018	\$ 184.65 / ft	5		\$1,107.90	Metaux Solutions

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		4	1A		IM17-4-H900-B0.250X4.000	17-4 SS H900 Bar 0.250" X 04.000" MATERIAL: 17-4 PH SS BAR AS PER AMS 5604/5643 GRAIN MUST RUN ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI receive ft				12		12		S088679	Stock	6/28/2018	\$ 69.05 / ft	5		\$828.60	Metaux Solutions
										Total:		230								\$2,333.35	

Plex 7/13/2018 8:37 AM dart.Tollis.Andrew

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel: 450 641-3330

Customer: 6323336

Shipping Order

27/06/2018

Order : 136010
Reference : 40153
Bid : 27770
Ship : PICK UP / PICK UP

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
SF14124HR	304 STAIN FLA .25" X .500" HR 17 X 12.92' <i>AT</i>	219.64	<u>219.64</u>	<u>0</u>
SR14174	<i>HT: 67736108</i> <i>06/07/18</i> 17-4PH ROU .250 DIA H900 1 X 11' <i>AT</i> <i>ht6sh0596</i>	11	<u>11</u>	<u>0</u>
SF144174	17-4 PH FLAT 1/4" X 4.00" H900 1 X 12.58' <i>AT</i> <i>HT273320</i>	12.58	<u>12.58</u>	<u>0</u>
SR234174	ST 17-4PH ROU 2.750 DIA H1150 1 X 6' ***** <i>AT</i> <i>HT721Y</i> <i>06/07/18</i>	6	<u>6</u>	<u>0</u>

SHIP JOURNEY COLLECT
JP

Shipping : _____
Package No : _____
Merchandise Received: _____

Ref. : _____



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040153

Supplier: MES002-VC
Metaux Solutions
2625 boul Jacques-Cartier Est
Longueuil
QC
J4N 1L7 Canada
Phone: 800 558 8858
Fax: 514 633 8044

PO No: PO040153

PO Date: 6/11/18

Due Date: 6/25/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

E-MAILED
JUN 11 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments: bid 27770

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M304B0.250x0.500 - AT		304 Bar .250 X .500 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	6/15/18	200 ft	0 ft	200 ft	\$4.25/ft	\$850.00
2	M17-4-H900- R0.250 ✓ AT		17-4 SS H900 Round Bar 0.250" : : M174PH-H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643	Firmed	6/25/18	12 ft	0 ft	12 ft	\$23.40/ft	\$280.80
3	M17-4-H1150- R2.750 ✓ AT		17-4 SS H1150 Round Bar 2.750" : MATERIAL: 17-4 PH CONDITION H1150 receive ft	Firmed	6/25/18	6 ft	0 ft	6 ft	\$184.65/ft	\$1,107.90
4	M17-4-H900- B0.250X4.000 ✓ AT		17-4 SS H900 Bar 0.250" X 04.000" : MATERIAL: 17-4 PH SS BAR AS PER AMS 5604/5643 GRAIN MUST RUN ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI receive ft	Firmed	6/25/18	12 ft	0 ft	12 ft	\$69.05/ft	\$828.60

Grand Total: \$3,067.30

Order Notes

CLP

Plex 6/11/18 8:17 AM dart.lavoie.chantal

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 6/11/18 8:17 AM dart.lavoie.chantal

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel.: 450 641-3330

Bid 05/06/2018 27770

Sales Rep. : JEROME PRIMEAU
Reference : chantal
Expiration Date : 03/09/2018

Customer: 6323336

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To :

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Price	Total	Tx
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N				
SR14174	17-4PH ROU .250 DIA h900 1 x 12' r/l ht;	12	23.40	280.80 ✓	A
SF144174	17-4 PH FLAT 1/4" X 4.00" H900 1 X 12' R/L HT;	12	69.05	828.60 ✓	A
SR234174	ST 17-4PH ROU 2.750 DIA H1150 1 X 6' HT;	6	184.65	1 107.90 ✓	A

7/10 DAYS

304 Bo. 250 x 0.500
x 200ft

A) Regist :	COPY	Subtotal	2 217.30
		HST :	288.25
		Total :	2 505.55

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
19-JUN-2018

44926-J
PART NUMBER/NUMÉRO DE PIÈCE
511673

voice Number
T380992

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 17-4 HRAP BAR SOL ANN ASTM A564
1/4 X 4 FLAT X 12" R/L

Line Total: 44 LB

HEAT: 273320

ITEM: 511673

Specifications:

AMS 5643 V

AMS 2303 F

ASTM F899 12

ASTM A564 T630 13
AMS H 6875 B

ASME SA564 T630 15
ASTM A370 17

CHEMICAL ANALYSIS

C	SI	MN	CR	MO	CU	NI	CO
0.033	0.42	0.5300	15.19	0.22	3.28	4.61	0.068
P	S	N	TA	NBTA			
0.025	0.001	0.037	0.0015	0.273			

RCPT: R483230

COUNTRY OF ORIGIN : ITALY

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED IN AREA	HARDNESS BHN
COND A					343
DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
DEV: H900 L	KSI	KSI	IN 02 IN	IN AREA	BHN
	180.0	201.0	17.0	56.0	430

GRAIN SIZE : 5 -

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The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
19-JUN-2018

44926-J
PART NUMBER/NUMÉRO DE PIÈCE
511673

Invoice Number
T380992

SOLD TO: METAUX SOLUTIONS INC.

VENDU À:

SHIP TO:
EXPÉDIÉ À:

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 17-4 HRAP BAR SOL ANN ASTM A564
1/4 X 4 FLAT X 12' R/L
HEAT: 273320

ITEM: 511673

Line Total: 44 LB

MATERIAL IS FREE FROM MERCURY CONTAMINATION
THERMAL TREATMENT: OK
SOL ANNEALED 1904F 1 HR
AIR COOLED TO BELOW 90F
MACRO: OK
MICRO1: OK
AMS NO :2303
SEVERITY :0.0
FREQUENCY:0.0

COMMENTS

melt/mfg italy
red ratio 49.8:1
dfars compliant

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Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 17-4 PH / TYPE 630 / S17400 SS BAR
GRAIN MUST BE ALONG LENGTH OF BAR
MINIMUM YIELD STRENGTH PER TABLE
MINIMUM ULTIMATE STRENGTH PER TABLE

SPECIFICATION: AMS 5604 OR AMS 5643 OR ASTM A693 OR ASTM 564

PART NUMBER: M17-4-|HHHH-|B| T.TTT |X| WW.WWWW | WHERE: HHHH SPECIFIES THE MATERIAL CONDITION (PER TABLE BELOW)
COND | THICK | WIDTH | T.TT SPECIFIES THE THICKNESS
WW.WWWW SPECIFIES THE WIDTH

MATERIAL CONDITION TABLE:

CODE	CONDITION	MIN YIELD TENSILE STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	NONE SPECIFIED (CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	155	170
H1025	H1025	145	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
CONDA	CONDITION A (SOLUTION TREATED)		

NOTES: MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS
MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE
CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND SHOULD ALWAYS BE HEAT TREATED

EXAMPLES:

PART: 0.250" X 4.000" BAR MIN UTS = 150 KSI, MIN YTS = 100 KSI
0.250" X 2.500" BAR H900 CONDITION
1.000" X 2.500" BAR H900 CONDITION
0.500" X 3.250" BAR H1025 CONDITION
0.750" X 2.500" BAR A CONDITION

PART NUMBER
M17-4-B0-250X4.000
M17-4-H900-B1.000X2.500
M17-4-H1025-B0.500X3.250
M17-4-CONDA-B0.750X2.500

RELEASED
2017-10-31
EAM/7-728

APPROVED

B	ADD MATERIAL CONDITION AND REFORMAT DRAWING (CIR17-107)	NO	17.09.14
A	NEW ISSUE	DS	02.04.18
REV.	DESCRIPTION	BY	DATE
DESIGN	NO		
DRAWN	NO		
CHECKED	CP		
MFG. APPR.	DD		
APPROVED	WM		
DE APPR.	CP		
DATE	17.09.14		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. M17-4-B REV. B SHEET 1 OF 1 SCALE NTS COPYRIGHT © 2002 BY DART AEROSPACE LTD ALL RIGHTS RESERVED NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M174-H900-60.250x4.000
 DATE: 18/06/28

PO / BATCH NO.: P0040153/5088679

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 12.58'
 QUANTITY INSPECTED: 12.58
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.250"
 THICKNESS RECEIVED: 0.250"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	AMS 5643
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	HT: 273320
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DAS 9 9-89 DATE: <u>18/06/28</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
19-JUN-2018

44926-J
PART NUMBER/NUMÉRO DE PIÈCE
510497

Invoice Number
T380991

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 17-4 SOL ANN CF BAR

ASTM A564
Line Total: 2 LB

HEAT: 6SH0596

ITEM: 510497

Specifications:

AMS 5643 U

ASTM A388 16

ASTM F899 12B

ASTM A564 T630 13
AMS 2303 F

ASME SA564 T630 13
EN 10204 3.1

CHEMICAL ANALYSIS

C	SI	MN	P	S	NI	CR	MO
0.02	0.46	0.66	0.026	0.001	4.30	15.33	0.10
CU	NBTA	NB	TA				
3.38	0.23	0.23	0.0044				

RCPT: R378229

COUNTRY OF ORIGIN : TAIWAN

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
COND A				IN AREA	BHN
					315
DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
DEV: H900 L	KSI	KSI	IN 02 IN	IN AREA	BHN
	220.0	221.0	15.0	61.0	421

GRAIN SIZE : 8

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Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES

Joanne Despres

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
19-JUN-2018

44926-J
PART NUMBER/NUMÉRO DE PIÈCE
510497

Invoice Number
T380991

6

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 17-4 SOL ANN CF BAR
1/4 RD X 12' R/L
HEAT: 6SH0596

ITEM: 510497

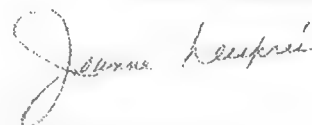
ASTM A564
Line Total: 2 LB

MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL
MACRO: OK
MICRO1: OK

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Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

PART NUMBER:

PART NUMBER: M17-4- HHHH- R X.XXX
COND . O.D.

CODE	CONDITION	MIN YIELD TENSILE STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	NONE SPECIFIED (CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	155	170
H1025	H1025	145	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
CONDA	CONDITION A (SOLUTION TREATED)		

△

PART	DESCRIPTION	PART NUMBER
M0000	DIAMETER BAR MIN UTS = 150 KSI, MIN YTS = 100 KSI	M17-4-R-7000
M0500	DIAMETER BAR H900 CONDITION	M17-4-H900-R2,500
M3250	DIAMETER BAR H1025 CONDITION	M17-4-H1025-R3,250
M0750	DIAMETER BAR A CONDITION	M17-4-CONDA-R0,750

DELETED
2017-10-31
2017-728

APPROVED

REV	DESCRIPTION	BY	DATE
C	ADDED MATERIAL CONDITION (C117-107) (P) FORMAT DWG. S17400/TYPE 630 ADDED TO PURCHASE MATERIAL (ZN D5-1) ADDED SPEC (C8-1). REF PAR 004020A	NO	17.09.14
B		V5	10.05.20
A	NEW ISSUE	CP	05.03.16
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4-H100-R0.250
 DATE: 18/06/28

PO / BATCH NO.: P0040153/208678

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 11'
 QUANTITY INSPECTED: 11'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.250"
 THICKNESS RECEIVED: 0.250"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	ASTM A564
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	HT: 6540596
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DAS 9 9-85 DATE: <u>18/06/28</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
19-JUN-2018

44926-J
PART NUMBER/NUMÉRO DE PIÈCE
527141

Invoice Number
T380993

SOLD TO: METAUX SOLUTIONS INC.	SHIP TO: METAUX SOLUTIONS (RIVE-SUD)
VENDU À: 2625 BOUL JACQUES CARTIER EST	EXPÉDIÉ À: 2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7	LONGUEUIL QC J4N 1

Description: 17-4 HR RT BAR COND H1150
2-3/4 RD S/C 6'0" (72.0")
HEAT: 721Y
ITEM: 527141

ASTM A564
Line Total: 121.26 LB

Specifications:

AMS 5643 V	ASTM A564 TYPE 630 13E1	ASME SA564 TYPE 630 13
AMS 2750 D	AMS H 6875 B	AMS 2303
MIL STD 1685 A	EN 10204 3.1	ASTM A388 S1

CHEMICAL ANALYSIS

C	CB	CO	CR	CU	MN	MO	N
0.034	0.231	0.05	15.18	3.34	0.81	0.014	0.019
NI	P	S	SI	TA	TI	CBTA	
4.2200	0.019	0.017	0.57	0.005	0.0035	0.236	

RCPT: R478862

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
COND H1150	KSI	KSI	IN 02 IN	IN AREA	BHN
	120.18	139.47	20.75	60.91	321

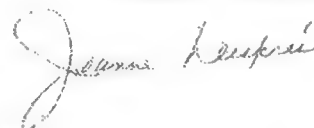
GRAIN SIZE : 8

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
19-JUN-2018

44926-J

Invoice Number
T380993

PART NUMBER/NUMÉRO DE PIÈCE

527141

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 17-4 HR RT BAR COND H1150
2-3/4 RD S/C 6'0" (72.0")

HEAT: 721Y

ITEM: 527141

ASTM A564
Line Total: 121.26 LB

MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL

MACRO: OK

MICRO1: OK

AMS NO :2301

SEVERITY :0.15

FREQUENCY:0.25

COMMENTS

MELT/MFG USA

RED RATIO 9.8:1

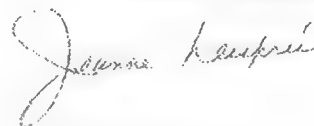
COMPLIES WITH DFAR 252.225-7009

2011/65/EU ROHS COMPLIANT

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut. The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

APPROVED

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4-H1150-R2-750
 DATE: 18/06/21

PO / BATCH NO.: P0040153/5088480

MATERIAL CERT REC'D: _____
 QUANTITY RECEIVED: 6.24
 QUANTITY INSPECTED: 6.24
 QUANTITY REJECTED: _____

THICKNESS ORDERED: 2.750"
 THICKNESS RECEIVED: 2.750"
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	ASTM A564
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	47:7214
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AL / RD 13-07-06</u> DATE: <u>18/06/28</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

BOLLINGHAUS
STEEL

Bollinghaus Steel, SA
DIN EN ISO 9001:2008
TÜV CERT No. 01 100 030458

Absoluter Prüfzeugnis/AMT Test Certificate/Certif. de Qualidade

EN 10204:2004 / 3.1

No.: / No.: / Nr.:

0000136628

Unsere Innere Verwelsung / Our Int. Ref / ref int

Datum / Date / Data

5600038278 000010

19.12.2017

Spezifikation / Standards / Normas

TYPE 304/UNS S30400 and TYPE 304L/UNS S30403 ecc. to ASTM A276/A276M-16a, ASTM A182/A182M-16a, ASTM A193/A193M-16, ASTM A479/A479M-16a, ASTM A320/A320M-16a, ASTM A314-15, ASTM A282-15 Pract. E, AMS QQ-S-763D, AMS 5630J, AMS 5647K, ASME SA479/SA479M, ASME SA276, ASME SA182/182M, ASME SA 193/SA193M, ASME SA320/SA320M, NACE MR0175-2015, execution as per ASTM A484/A484M-16.

Kunde / Customer / Cliente

Endgültiger Kunde / Final Customer / Cliente Final

Bestell Nr./Order Nr./Enc.Nr. c110766

Bestell Nr./Order Nr./Enc.Nr. c110766.1

Produktgruppe / Product Group / Grupo Produto

Gewicht / Weight / Peso

Bunde / Bundle / Atados

AISI 304/L FLAT 1/4 X 1/2"

1.059 lb

01

Werkstoff-Nr.

Material-no.

Qualidade

1.4307

Werkstoff-Normbezeichnung / Material standard grade / Norma do material

X 2 CrNi 18-9

Beschreibung / Description / Descrição

Stainless steel flat bars, hot rolled, heat treated, straightened and pickled
US DFAR 252.225-7009; MELT SOURCE: France / MFG: Portugal.

Schmelzen Nr.
Cast nr. / Fusão nr.

67736108

EAF+AOD

Chemische Analyse In % / Chemical composition In % / Análise química em %

C	0.018	Si	0.525	Mn	1.154	P	0.029	S	0.025	Cr	16.127	Ni	8.045
Mo	0.378	Co	0.117	Cu	0.406	N	0.090	Ti	0.002	-	-	-	-

Proben Nr.
Test no.
Amostra no.

4038951.01.01

ASTM E399

Kerbschlagarbeit

Impact Test

Resistência

{Charpy V}

[J]

Streckgrenze

Yield point

Tensão limite

Rp 0,2 %

[Ksi]

48

Dehngrenze

1% point

Limite de extensão

Rp 1,0 %

[Ksi]

57

ASTM A370

Zugfestigkeit

Tensile strength

Tensão de ruptura

Rm

[Ksi]

93

Dehnung

Elongation

Aalongamento

A5

[%]

53.9

Einweichung

Reduction of area

Coef. Estricho

Z

[%]

70.1

Visuelle Kontrolle

Visual inspection

Inspeção visual

Ok

ASTM E10

HRB

Hardness

Dureza

[HB]

195

ASTM A262 Practice E

Korrosionsbeständigkeit

IC Test

Corrosão Intermetálica

OK

Abnahmebeauftragter

Authorized Inspection Representative

Inspector de Qualidade

396

Vasco Ferreira (Q - VF)

Wärmebehandlung

Heat treatment

Tratamento térmico

Annulated Quenched 1900 °F (1050 °C)

(water quenched)

ASTM A484

Maßkontrolle

Dimensional inspection

Inspeção dimensional

Ok

ASTM E112

Korngröße

Grain size

Tamanho de grão

9

Metastatische Untersuchung

Macrographic test

Material free from

segregation defects.

OK

Verwechslungsprüfung

Test of identity

Teste de identificação

Ok

Bemerkungen / Remarks / Observações

Country of origin: Portugal, No weld repair done;
Material is free of mercury and radiation contamination.

Bollinghaus Steel, SA

Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht.
We confirm that this material meets the specification according to the mentioned standards.
Confirmamos que este material respeta as especificações de acordo com as normas referidas.

019900

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
(NOTE: AISI 303 NOT ACCEPTABLE)

△ SPECIFICATION:
PART NUMBER: M304B | T.TTT | X | WW.WWWW |
THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
AND "WW.WWWW" = WIDTH IN INCHES

△ EG. 0.5" X 3.0" BAR = M304B0.500X03.000
EG. 0.5" X 12.0" PLATE = M304B0.500X12.000

RELEASED
2010-11-30

C	ADDED PLATE TO PURCHASE MATERIAL. ADDED PLATE RELATED SPECIFICATIONS, AND EG.: CHANGED TITLE FROM "304/316 BAR" TO "304/316 BAR/PLATE"	MB	10.11.25
B	REFORMAT DWG. ADD SPECS (2N D8-1).	CP	09.07.15
A	NEW ISSUE	PH	05.08.10
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.11.25		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M304B		REV. C	
TITLE 304/316 BAR/PLATE		SHEET 1 OF 1	
		SCALE NTS	
COPYRIGHT © 2008 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304B0.250x0.500
 DATE: 18/06/28

PO / BATCH NO.: A0040153/5088677

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 219.64'
 QUANTITY INSPECTED: 219.64'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.250"
 THICKNESS RECEIVED: 0.250"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A276
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	47: 67736108
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT/10</u>	SIGNED OFF BY: _____		
DATE: <u>18/06/28</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in